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10/014,977	12/10/2001	Michael Evan Webber	260/289	3321
34026	7590	10/23/2006	EXAMINER	
JONES DAY			NASSER, ROBERT L	
555 SOUTH FLOWER STREET FIFTIETH FLOOR			ART UNIT	
LOS ANGELES, CA 90071			PAPER NUMBER	
			3735	
DATE MAILED: 10/23/2006				

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/014,977  
Filing Date: December 10, 2001  
Appellant(s): MICHAEL WEBBER

**MAILED**  
**OCT 23 2006**  
**Group 3700**

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Coe Bloomberg  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/9/2006 appealing from the Office action mailed 5/19/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: As was clearly noted in the prior examiner's answer, Culver is not used as a reference in rejecting 1, 4-6, 8, 9, 11, 13,

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14, 17 and 18. Culver was used in a previous rejection. Its inclusion in the rejection statement is a typographical error and, Culver has been replaced with Phillips.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

<b>3830630</b>	<b>Kiefer</b>	<b>8-1974</b>
<b>5376555</b>	<b>Forrester et al</b>	<b>12-1994</b>
<b>4582068</b>	<b>Phillipps et al</b>	<b>4/1986</b>
<b>6192261</b>	<b>Gratton et al</b>	<b>2-2001</b>
<b>6038913</b>	<b>Gustaffson et al</b>	<b>3-2000</b>

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The examiner notes that in the rejection to claims 20, 21, 22, 24-26, 29, 30, 32-34, 36, 37, 39, 41, and 42, that Culver was inadvertently listed as the reference. The reference should have been Phillipps, which was clear, since the rejection stated "as applied to claims 1, 4-6, 8, 10, 11, 13, 14, 17, and 19 above."

Claims 1, 4-6, 8, 10, 11, 13, 14, 17, and 19 are rejected under 435 U.S.C. 103(a) as being obvious over Kiefer et al 3830630 in view of Forrester et al 537655 and

Phillipps et al 5482068. With respect to claims 1, 4-6, 8, 10, 11, 13, 14, 17 and 19, Kiefer teaches method of analyzing alveolar breath by expiring breath into a chamber, continuously monitoring the concentration of carbon dioxide in the expired breath with a detector 17, and when the carbon dioxide level reaches 4.5%, triggering the measurement of alcohol concentration in the alveolar breath. Neither the carbon dioxide nor the alcohol measurements are done optically. Forrester et al further teaches a similar measuring arrangement using the carbon dioxide concentration to trigger the measurement of alcohol concentration, where both the carbon dioxide and alcohol levels are done optically. Hence, it would have been obvious to modify Kiefer et al to use optical measurements, as it is merely the substitution of one known equivalent sensing method for another. The combination does not base the trigger threshold on previous measurements. Phillipps et al shows a breath monitoring device where a threshold is updated based on only the immediately previous patient measurement, to tune the device to the particular patient. Hence, it would have been obvious to modify the above combination to update the threshold based on previous measurements, in order to allow the device to be fine tuned to each patient.

Claims 20, 21, 22, 24-26, 29, 31-34, 36, 37, 39, 40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiefer et al in view of Forester et al and Phillipps et al as applied to claims 1, 4-6, 8, 10, 11, 13, 14, 17, and 19 above, and further in view of Gratton et al 6192261. With regard to claims 20, 21, 22, 24-26, 29, 31-34, 36, 37, 39, 40, and 42, the only remaining difference is that applicant recites that the two light signals are multiplexed. Gratton et al teaches in figure 4, that which is well

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known in this field, i.e. that it is known to multiplex signals of different wavelengths for measurement. Hence, it would have been obvious to modify the above combination to multiplex the signals, as it is the substitution of one equivalent measurement technique for another.

Claims 1, 4-6, 8, 9, 11, 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being obvious over Gustafsson et al 6038913 in view of Kiefer, Forrester et al and Phillipps et al. With respect to claims 1, 4-6, 8, 9, 11, 13, 14, 17 and 18, Gustafsson teaches a method of measuring NO in alveolar air using spectrophotometric techniques. It does not teach a method of ensuring that only alveolar breath components are measured. Kiefer teaches method of analyzing alveolar breath by expiring breath into a chamber, continuously monitoring the concentration of carbon dioxide in the expired breath with a detector 17, and when the carbon dioxide level reaches 4.5%, triggering the measurement of alcohol concentration in the alveolar breath. The carbon dioxide measurement is not done optically. Forrester et al further teaches a similar measuring arrangement using the carbon dioxide concentration to trigger the measurement of alcohol concentration, where the carbon dioxide levels are measured optically. Hence, it would have been obvious to modify Kiefer et al to use optical measurements, as it is merely the substitution of one known equivalent sensing method for another. The combination does not base the trigger threshold on previous measurements. Phillipps teaches a breath monitoring device where a threshold is update based on previous patient measurements, to tune the device to the particular patient. Hence, it would have

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been obvious to modify the above combination to update the threshold based on previous measurements, in order to allow the device to be fine tuned to each patient.

Claims 20, 21, 22, 24-26, 29, 30, 32-34, 36, 37, 39, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafsson et al in view of Kiefer et al and Forester et al and Phillips et al as applied to claims 1, 4-6, 8, 9, 11, 13, 14, 17, and 18 above, and further in view of Gratton et al. With regard to claims 20, 21, 22, 24-26, 29, 30, 32-34, 36, 37, 39, 40, and 41, the only remaining difference is that applicant recites that the two light signals are multiplexed. Gratton et al teaches in figure 4, that which is well known in this field, i.e. that it is known to multiplex signals of different wavelengths for measurement. Hence, it would have been obvious to modify the above combination to multiplex the signals, as it is the substitution of one equivalent measurement technique for another.

#### **(10) Response to Argument**

Appellant has asserted that Phillips does not measure any breath components. The examiner agrees, but note that the Federal Circuit has held that a reference is good for all it teaches. Here, it is the examiner's position that Phillips is an example of what is well known in the medical monitoring field, to update thresholds based on patient data, to tune the measuring device to the particular patient.

Appellant has further asserted that none of the references alone or together teach the claimed invention. The examiner agrees that none of the reference alone

teach the invention, but notes that it was never alleged that the references alone teach the invention. It is the examiner's position that the references together teach the invention.

Specifically, the examiner notes that the Kiefer/Forrester combination teaches all of the features of the invention, except for updating the threshold based on the immediately preceding measurement. In other words, the issue is whether making the threshold variable is a patentable distinction given a fixed threshold. It is the examiner's position that such an updating technique is well known in the medical arts and that Phillips is just one example of such a technique.

Appellant has further asserted that the examiner has engaged in impermissible hindsight. The examiner disagrees.

Appellant has asserted that there is no suggestion to update the threshold. The examiner disagrees, noting that the suggestion comes from Phillips and knowledge generally available in the art, as discussed above.

Appellant has further asserted that Kiefer teaches away from the combination. The examiner agrees that Kiefer teaches a fixed threshold. Appellant has noted that such a combination would require changing a resistor between measurements. The examiner notes that Federal Circuit law does not require that the references provide a step by step map to making the combination. Rather, the law only requires that the modification be within a matter of routine experimentation for one skilled in the art. In the present case, it is the examiner's position that the proposed combination is a matter of routine experimentation for one skilled in the art. For example, one skilled in the art



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might replace the resistor referred to by applicant with a computer controlled variable resistor that can be varied according to the modified threshold.

Once again, in the Gustaffson based rejection, the examiner notes that Culver is not used in the rejection, which has previously been made clear on the record.

Appellant has asserted that Gustaffson does not have all of the claim features. The examiner agrees, but notes it is used in an obviousness combination.

With respect to the rejection including Gratton, appellant has again asserted that Gratton does not measure breath components. Again, the examiner notes that a reference is good for all it teaches.

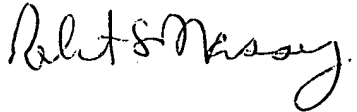
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

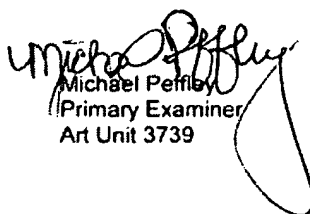
Respectfully submitted,

Robert L. Nasser Jr.

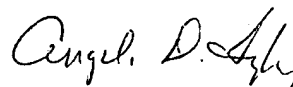


Conferees:

ROBERT L. NASSER  
PRIMARY EXAMINER



Michael Perillo  
Primary Examiner  
Art Unit 3739



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER

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